Exhibit 1 — Nutrient Budget Worksheet

11/2005

Landowner: Mitchell Poultry Farm	Field No. 5	52 Acres

Purpose (Check all that apply)

- ☑ Budget and supply nutrients for plant production
- ☑ Minimize agricultural nonpoint source pollution
- ☑ Utilize organic material as nutrient source
- ☑ Maintain or improve soil condition

Crop Sequence/Rotation	Expected Yield
Bermuda	5 ton

Nutrient Content of Manure per ☑ Ton ☐ lbs./1000 gal.

N Test	N Remaining	P_2O_5	K_2O
43	21.5	60	30

Current Soil Test Levels

N	P	K	pH	SOM%	EC
0	54	153	5.8		

Recommended Nutrients to Meet Expected Yield and Grass Establishment (See Tables in 590 Standard)

N	N for Grass Est.	P_2O_5	K2O	Lime	Other
250		9	43		

Nutrient Sources

Credits	N	P_2O_5	K_2O
1. Nitrogen credits from previous legume crop			
2. Residual from long-term manure application			
3. Irrigation water			
4. Other (Atmosphere, etc.)	0		
5. Total Credits	0	0	0

Applied Nutrients		N		P_2O_5		K_2O	
		Alt. 1	Alt. 2	Alt. 1	Alt. 2	Alt. 1	Alt. 2
6. Fertilizer	Starter						
	Other	179					
7. Manure or Organic by-products		71		200		99	
8. Total Applied Nutrients		250	0	200	0	99	0
9. Total Nutrients (add lines 5 and 8 plus N from Soil Test)		250	0	200	0	99	0
10. Recommended Nutrients		250	250	9	9	43	43
11. Nutrient Status (subtract line 10 from 9)		0	-250	191	-9	56	-43

If line 11 is a negative number, this is the amount of additional nutrients needed to meet the crop recommendation.
If line 11 is a positive number, this is the amount by which the applied nutrients exceed the crop requirements.

Nutrient Management Decision - Including method, rate, form and timing of application.	Producer Selected Alternative:	1

3.3 tons poultry litter per acre plus 179 lbs. of actual N per acre to reach 5 ton yield goal.

Ctrl + d clears worksheet

11/2005

OKLAHOMA PHOSPHORUS ASSESSMENT WORKSHEET

Client Name:	Mitchell Poultry Farm	Field(s):	6	Date:	2/21/2007
Planner:	Eric Daniels	Location:	7/20/2025	Crop:	Berm
Nutrient Limited Watershed (yes/no):	Yes			Ctrl + C clears worksheet	

Soil Test P Index Mehlich III (lbs./ac)	118			
Application Method	Surface applied and incorporated within 7 days or injected 2" below the surface	Surface applied or incorporated more than 7 days after application	Surface applied on frozen or snow covered ground	
	X			
Land Slope %	0 - 8 %	8.1 - 15 %	> 15.1 %	
	X			
Erosion Rate Greater Than "T"	No	Yes		
	X			
Flooding Frequency	None	Occasionally	Frequently	
	X			
Distance of Manure Application to Perennial Stream, Pond, Well, or Sinkhole	> 100 ft. or Buffer Strip Established	0 - 100 ft.		
	X			
Distance of Manure Application to Intermittent Stream	> 50 ft. or Buffer Strip Established	0 - 50 ft.		
	X			
Depth of Soil	> 20.1 in.	10.1 - 20 in.	0 - 10 in.	
	X			
Rock Fragments in soil surface 3" to 10 " in diameter and exceed 50% by weight or > 10" in diameter and exceed 25% by weight	No	Yes		
	X			
Rocks > 10" in diameter which cover > 3% of the soil surface	No	Yes		
	X			

Moderate Rating	Apply at full rate	Apply up to the following rates of P2O5 annually not to exceed the Nitrogen requirement of the crop: Application of up to 200 lbs/ac P2O5 when surface applied. Application of up to 300 lbs/ac P2O5 when applied through sprinkler irrigation and managed to prevent runoff. Application of up to 400 lbs/ac P2O5 when incorporated within 7 days. When a Split Application is designated, no more than 1/2 the allowed rate of P2O5 will be applied per application at least 30 days apart. On occassionally flooded soils, application may be made between June 20 through September 20. Application may also be made between February 1 through April 20 on established cool season grasses with at least 4 inches of height.

Exhibit 1 — Nutrient Budget Worksheet

11/2005

Landowner: Mitchell Poultry Farm	Field No. 6	14 Acres

Purpose (Check all that apply)

- ☑ Budget and supply nutrients for plant production
- ☑ Minimize agricultural nonpoint source pollution
- ☑ Utilize organic material as nutrient source
- ☑ Maintain or improve soil condition

Crop Sequence/Rotation	Expected Yield
Bermuda	5 ton

Nutrient Content of Manure per ☑ Ton ☐ lbs./1000 gal.

N Test	N Remaining	P_2O_5	K_2O
43	21.5	60	30

Current Soil Test Levels

N	P	K	pH	SOM%	EC
0	118	84	5.3		

Recommended Nutrients to Meet Expected Yield and Grass Establishment (See Tables in 590 Standard)

N	N for Grass Est.	P_2O_5	K2O	Lime	Other
250		0	75	1.9	

Nutrient Sources

Credits	N	P_2O_5	K_2O
1. Nitrogen credits from previous legume crop			
2. Residual from long-term manure application			
3. Irrigation water			
4. Other (Atmosphere, etc.)	0		
5. Total Credits	0	0	0

Applied Nutrients		N		P_2O_5		K_2O	
		Alt. 1	Alt. 2	Alt. 1	Alt. 2	Alt. 1	Alt. 2
6. Fertilizer	Starter						
	Other	179					
7. Manure or Organic by-products		71		200		99	
8. Total Applied Nutrients		250	0	200	0	99	0
9. Total Nutrients (add lines 5 and 8 plus N from Soil Test)		250	0	200	0	99	0
10. Recommended Nutrients		250	250	0	0	75	75
11. Nutrient Status (subtract line 10 from 9)		0	-250	200	0	24	-75

If line 11 is a negative number, this is the amount of additional nutrients needed to meet the crop recommendation.
If line 11 is a positive number, this is the amount by which the applied nutrients exceed the crop requirements.

Nutrient Management Decision - Including method, rate, form and timing of application.	Producer Selected Alternative:	1

3.3 tons poultry litter per acre plus 179 lbs. of actual N per acre to reach 5 ton yield goal. 1.9 ton ECCE lime per Acre.

Ctrl + d clears worksheet

11/2005

OKLAHOMA PHOSPHORUS ASSESSMENT WORKSHEET

Client Name:	Mitchell Poultry Farm	Field(s):	10	Date:	2/21/2007
Planner:	Eric Daniels	Location:	7/20/2025	Crop:	Berm
Nutrient Limited Watershed (yes/no):	Yes			Ctrl + C clears worksheet	

Soil Test P Index Mehlich III (lbs./ac)	296			
Application Method	Surface applied and incorporated within 7 days or injected 2" below the surface	Surface applied or incorporated more than 7 days after application	Surface applied on frozen or snow covered ground	
		x		
Land Slope %	0 - 8 %	8.1 - 15 %	> 15.1 %	
	x			
Erosion Rate Greater Than "T"	No	Yes		
	x			
Flooding Frequency	None	Occasionally	Frequently	
	x			
Distance of Manure Application to Perennial Stream, Pond, Well, or Sinkhole	> 100 ft. or Buffer Strip Established	0 - 100 ft.		
	x			
Distance of Manure Application to Intermittent Stream	> 50 ft. or Buffer Strip Established	0 - 50 ft.		
	x			
Depth of Soil	> 20.1 in.	10.1 - 20 in.	0 - 10 in.	
	x			
Rock Fragments in soil surface 3" to 10" in diameter and exceed 50% by weight or > 10" in diameter and exceed 25% by weight	No	Yes		
	x			
Rocks > 10" in diameter which cover > 3% of the soil surface	No	Yes		
	x			

Non Nutrient Limited Watershed Waste Application Rates

Nutrient Limited Watershed Waste Application Rates

High Rating	Apply at half rate	Apply up to the following rates of P2O5 annually not to exceed the Nitrogen requirement of the crop: Application of up to 100 lbs/ac P2O5 when surface applied. Application of up to 150 lbs/ac P2O5 when applied through sprinkler irrigation and managed to prevent runoff. Application of up to 200 lbs/ac P2O5 when incorporated within 7 days. When a Split Application is designated, no more than 1/2 the allowed rate of P2O5 will be applied per application at least 30 days apart. On occassionally flooded soils, application may be made between June 20 through September 20. Application may also be made between February 1 through April 20 on established cool season grasses with at least 4 inches of height.

(2009 Cargill supp-00211)

Exhibit 1 — Nutrient Budget Worksheet

11/2005

Landowner: Mitchell Poultry Farm	Field No. 10	22 Acres

Purpose (Check all that apply)

- ☑ Budget and supply nutrients for plant production
- ☑ Minimize agricultural nonpoint source pollution
- ☑ Utilize organic material as nutrient source
- ☑ Maintain or improve soil condition

Crop Sequence/Rotation	Expected Yield
Bermuda	5 ton

Nutrient Content of Manure per ☑ Ton ☐ lbs./1000 gal.

N Test	N Remaining	P_2O_5	K_2O
43	21.5	60	30

Current Soil Test Levels

N	P	K	pH	SOM%	EC
0	296	184	5.5		

Recommended Nutrients to Meet Expected Yield and Grass Establishment (See Tables in 590 Standard)

N	N for Grass Est.	P_2O_5	K2O	Lime	Other
250		0	34	1	

Nutrient Sources

Credits	N	P_2O_5	K_2O
1. Nitrogen credits from previous legume crop			
2. Residual from long-term manure application			
3. Irrigation water			
4. Other (Atmosphere, etc.)	0		
5. Total Credits	0	0	0

Applied Nutrients		N		P_2O_5		K_2O	
		Alt. 1	Alt. 2	Alt. 1	Alt. 2	Alt. 1	Alt. 2
6. Fertilizer	Starter						
	Other	214					
7. Manure or Organic by-products		36		100		50	
8. Total Applied Nutrients		250	0	100	0	50	0
9. Total Nutrients (add lines 5 and 8 plus N from Soil Test)		250	0	100	0	50	0
10. Recommended Nutrients		250	250	0	0	34	34
11. Nutrient Status (subtract line 10 from 9)		0	-250	100	0	16	-34

If line 11 is a negative number, this is the amount of additional nutrients needed to meet the crop recommendation.
If line 11 is a positive number, this is the amount by which the applied nutrients exceed the crop requirements.

Nutrient Management Decision - Including method, rate, form and timing of application.	Producer Selected Alternative:	1

1.6 tons poultry litter per acre plus 214 lbs. of actual N per acre to reach 5 ton yield goal. 1.0 ton ECCE lime per Acre.

Ctrl + d clears worksheet

11/2005

OKLAHOMA PHOSPHORUS ASSESSMENT WORKSHEET

Client Name:	Mitchell Poultry Farm	Field(s):	12	Date:	2/21/2007
Planner:	Eric Daniels	Location:	8/20/2025	Crop:	Berm
Nutrient Limited Watershed (yes/no):	Yes			Ctrl + C clears worksheet	

Soil Test P Index Mehlich III (lbs./ac)	181			
Application Method	Surface applied and incorporated within 7 days or injected 2" below the surface	Surface applied or incorporated more than 7 days after application	Surface applied on frozen or snow covered ground	
	x			
Land Slope %	0 - 8 %	8.1 - 15 %	> 15.1 %	
	x			
Erosion Rate Greater Than "T"	No	Yes		
	x			
Flooding Frequency	None	Occasionally	Frequently	
	x			
Distance of Manure Application to Perennial Stream, Pond, Well, or Sinkhole	> 100 ft. or Buffer Strip Established	0 - 100 ft.		
	x			
Distance of Manure Application to Intermittent Stream	> 50 ft. or Buffer Strip Established	0 - 50 ft.		
	x			
Depth of Soil	> 20.1 in.	10.1 - 20 in.	0 - 10 in.	
	x			
Rock Fragments in soil surface 3" to 10 " in diameter and exceed 50% by weight or > 10" in diameter and exceed 25% by weight	No	Yes		
	x			
Rocks > 10" in diameter which cover > 3% of the soil surface	No	Yes		
	x			

Non - Nutrient Limited Watershed Waste Application Rates		

Nutrient Limited Watershed Waste Application Rates		
High Rating	Apply at half rate	Apply up to the following rates of P2O5 annually not to exceed the Nitrogen requirement of the crop: Application of up to 100 lbs/ac P2O5 when surface applied. Application of up to 150 lbs/ac P2O5 when applied through sprinkler irrigation and managed to prevent runoff. Application of up to 200 lbs/ac P2O5 when incorporated within 7 days. When a Split Application is designated, no more than 1/2 the allowed rate of P2O5 will be applied per application at least 30 days apart. On occassionally flooded soils, application may be made between June 20 through September 20. Application may also be made between February 1 through April 20 on established cool season grasses with at least 4 inches of height.

Exhibit 1 — Nutrient Budget Worksheet — 11/2005

Landowner: Mitchell Poultry Farm	Field No. 12	10 Acres

Purpose (Check all that apply)

- ☑ Budget and supply nutrients for plant production
- ☑ Minimize agricultural nonpoint source pollution
- ☑ Utilize organic material as nutrient source
- ☑ Maintain or improve soil condition

Crop Sequence/Rotation	Expected Yield
Bermuda	5 ton

Nutrient Content of Manure per ☑ Ton ☐ lbs./1000 gal.

N Test	N Remaining	P_2O_5	K_2O
43	21.5	60	30

Current Soil Test Levels

N	P	K	pH	SOM%	EC
0	181	126	5.2		

Recommended Nutrients to Meet Expected Yield and Grass Establishment (See Tables in 590 Standard)

N	N for Grass Est.	P_2O_5	K2O	Lime	Other
250		0	50	2.5	

Nutrient Sources

Credits	N	P_2O_5	K_2O
1. Nitrogen credits from previous legume crop			
2. Residual from long-term manure application			
3. Irrigation water			
4. Other (Atmosphere, etc.)	0		
5. Total Credits	0	0	0

Applied Nutrients		N		P_2O_5		K_2O	
		Alt. 1	Alt. 2	Alt. 1	Alt. 2	Alt. 1	Alt. 2
6. Fertilizer	Starter						
	Other	214					
7. Manure or Organic by-products		36		100		50	
8. Total Applied Nutrients		250	0	100	0	50	0
9. Total Nutrients (add lines 5 and 8 plus N from Soil Test)		250	0	100	0	50	0
10. Recommended Nutrients		250	250	0	0	50	50
11. Nutrient Status (subtract line 10 from 9)		0	-250	100	0	0	-50

If line 11 is a negative number, this is the amount of additional nutrients needed to meet the crop recommendation.
If line 11 is a positive number, this is the amount by which the applied nutrients exceed the crop requirements.

Nutrient Management Decision - Including method, rate, form and timing of application.	Producer Selected Alternative:	1

1.6 tons poultry litter per acre plus 214 lbs. of actual N per acre to reach 5 ton yield goal. 2.5 ton ECCE lime per Acre.

Ctrl + d clears worksheet

11/2005

OKLAHOMA PHOSPHORUS ASSESSMENT WORKSHEET

Client Name:	Mitchell Poultry Farm	Field(s):	13	Date:	2/21/2007
Planner:	Eric Daniels	Location:	8/20/2025	Crop:	Berm
Nutrient Limited Watershed (yes/no):	Yes			Ctrl + C clears worksheet	

Soil Test P Index Mehlich III (lbs./ac)	166			
Application Method	Surface applied and incorporated within 7 days or injected 2" below the surface	Surface applied or incorporated more than 7 days after application	Surface applied on frozen or snow covered ground	
		x		
Land Slope %	0 - 8 %	8.1 - 15 %	> 15.1 %	
	x			
Erosion Rate Greater Than "T"	No	Yes		
	x			
Flooding Frequency	None	Occasionally	Frequently	
	x			
Distance of Manure Application to Perennial Stream, Pond, Well, or Sinkhole	> 100 ft. or Buffer Strip Established	0 - 100 ft.		
	x			
Distance of Manure Application to Intermittent Stream	> 50 ft. or Buffer Strip Established	0 - 50 ft.		
	x			
Depth of Soil	> 20.1 in.	10.1 - 20 in.	0 - 10 in.	
	x			
Rock Fragments in soil surface 3" to 10 " in diameter and exceed 50% by weight or > 10" in diameter and exceed 25% by weight	No	Yes		
	x			
Rocks > 10" in diameter which cover > 3% of the soil surface	No	Yes		
	x			

Nutrient Limited Watershed Waste Application Rates

Nutrient Limited Watershed Waste Application Rates

High Rating	Apply at half rate	Apply up to the following rates of P2O5 annually not to exceed the Nitrogen requirement of the crop: Application of up to 100 lbs/ac P2O5 when surface applied. Application of up to 150 lbs/ac P2O5 when applied through sprinkler irrigation and managed to prevent runoff. Application of up to 200 lbs/ac P2O5 when incorporated within 7 days. When a Split Application is designated, no more than 1/2 the allowed rate of P2O5 will be applied per application at least 30 days apart. On occassionally flooded soils, application may be made between June 20 through September 20. Application may also be made between February 1 through April 20 on established cool season grasses with at least 4 inches of height.

Exhibit 1 — Nutrient Budget Worksheet — 11/2005

Landowner: Mitchell Poultry Farm	Field No. 13	8 Acres

Purpose (Check all that apply)

- ☑ Budget and supply nutrients for plant production
- ☑ Minimize agricultural nonpoint source pollution
- ☑ Utilize organic material as nutrient source
- ☑ Maintain or improve soil condition

Crop Sequence/Rotation	Expected Yield
Bermuda	5 ton

Nutrient Content of Manure per ☑ Ton ☐ lbs./1000 gal.

N Test	N Remaining	P_2O_5	K_2O
43	21.5	60	30

Current Soil Test Levels

N	P	K	pH	SOM%	EC
0	166	122	5.3		

Recommended Nutrients to Meet Expected Yield and Grass Establishment (See Tables in 590 Standard)

N	N for Grass Est.	P_2O_5	K2O	Lime	Other
250		0	52	1.2	

Nutrient Sources

Credits	N	P_2O_5	K_2O
1. Nitrogen credits from previous legume crop			
2. Residual from long-term manure application			
3. Irrigation water			
4. Other (Atmosphere, etc.)	0		
5. Total Credits	0	0	0

Applied Nutrients		N		P_2O_5		K_2O	
		Alt. 1	Alt. 2	Alt. 1	Alt. 2	Alt. 1	Alt. 2
6. Fertilizer	Starter						
	Other	214					
7. Manure or Organic by-products		36		100		50	
8. Total Applied Nutrients		250	0	100	0	50	0
9. Total Nutrients (add lines 5 and 8 plus N from Soil Test)		250	0	100	0	50	0
10. Recommended Nutrients		250	250	0	0	52	52
11. Nutrient Status (subtract line 10 from 9)		0	-250	100	0	-2	-52

If line 11 is a negative number, this is the amount of additional nutrients needed to meet the crop recommendation.
If line 11 is a positive number, this is the amount by which the applied nutrients exceed the crop requirements.

Nutrient Management Decision - Including method, rate, form and timing of application. Producer Selected Alternative: 1

1.6 tons poultry litter per acre plus 214 lbs. of actual N per acre to reach 5 ton yield goal. 1.2 ton ECCE lime per Acre.

Ctrl + d clears worksheet

11/2005

OKLAHOMA PHOSPHORUS ASSESSMENT WORKSHEET

Client Name:	Mitchell Poultry Farm	Field(s):	Hayes	Date:	2/21/2007
Planner:	Eric Daniels	Location:	8/20/2025	Crop:	Berm
Nutrient Limited Watershed (yes/no):	Yes			Ctrl + C clears worksheet	

Soil Test P Index Mehlich III (lbs./ac)	70			
Application Method	Surface applied and incorporated within 7 days or injected 2" below the surface	Surface applied or incorporated more than 7 days after application	Surface applied on frozen or snow covered ground	
		x		
Land Slope %	0 - 8 %	8.1 - 15 %	> 15.1 %	
	x			
Erosion Rate Greater Than "T"	No	Yes		
	x			
Flooding Frequency	None	Occasionally	Frequently	
	x			
Distance of Manure Application to Perennial Stream, Pond, Well, or Sinkhole	> 100 ft. or Buffer Strip Established	0 - 100 ft.		
	x			
Distance of Manure Application to Intermittent Stream	> 50 ft. or Buffer Strip Established	0 - 50 ft.		
	x			
Depth of Soil	> 20.1 in.	10.1 - 20 in.	0 - 10 in.	
	x			
Rock Fragments in soil surface 3" to 10 " in diameter and exceed 50% by weight or > 10" in diameter and exceed 25% by weight	No	Yes		
	x			
Rocks > 10" in diameter which cover > 3% of the soil surface	No	Yes		
	x			

		Non - Nutrient Limited Watershed Waste Application Rates
Moderate Rating	Apply at full rate	Apply up to the following rates of P2O5 annually not to exceed the Nitrogen requirement of the crop: Application of up to 200 lbs/ac P2O5 when surface applied. Application of up to 300 lbs/ac P2O5 when applied through sprinkler irrigation and managed to prevent runoff. Application of up to 400 lbs/ac P2O5 when incorporated within 7 days. When a Split Application is designated, no more than 1/2 the allowed rate of P2O5 will be applied per application at least 30 days apart. On occassionally flooded soils, application may be made between June 20 through September 20. Application may also be made between February 1 through April 20 on established cool season grasses with at least 4 inches of height.

Exhibit 1 — Nutrient Budget Worksheet — 11/2005

Landowner: Mitchell Poultry Farm	Field No. Hayes	16 Acres

Purpose (Check all that apply)

- ☑ Budget and supply nutrients for plant production
- ☑ Minimize agricultural nonpoint source pollution
- ☑ Utilize organic material as nutrient source
- ☑ Maintain or improve soil condition

Crop Sequence/Rotation	Expected Yield
Bermuda	5 ton

Nutrient Content of Manure per ☑ Ton ☐ lbs./1000 gal.

N Test	N Remaining	P_2O_5	K_2O
43	21.5	60	30

Current Soil Test Levels

N	P	K	pH	SOM%	EC
0	70	86	6.1		

Recommended Nutrients to Meet Expected Yield and Grass Establishment (See Tables in 590 Standard)

N	N for Grass Est.	P_2O_5	K2O	Lime	Other
250		0	73	0	

Nutrient Sources

Credits	N	P_2O_5	K_2O
1. Nitrogen credits from previous legume crop			
2. Residual from long-term manure application			
3. Irrigation water			
4. Other (Atmosphere, etc.)	0		
5. Total Credits	0	0	0

Applied Nutrients		N		P_2O_5		K_2O	
		Alt. 1	Alt. 2	Alt. 1	Alt. 2	Alt. 1	Alt. 2
6. Fertilizer	Starter						
	Other	179					
7. Manure or Organic by-products		71		200		99	
8. Total Applied Nutrients		250	0	200	0	99	0
9. Total Nutrients (add lines 5 and 8 plus N from Soil Test)		250	0	200	0	99	0
10. Recommended Nutrients		250	250	0	0	73	73
11. Nutrient Status (subtract line 10 from 9)		0	-250	200	0	26	-73

If line 11 is a negative number, this is the amount of additional nutrients needed to meet the crop recommendation.
If line 11 is a positive number, this is the amount by which the applied nutrients exceed the crop requirements.

Nutrient Management Decision - Including method, rate, form and timing of application.	Producer Selected Alternative:	1

3.3 tons poultry litter per acre plus 179 lbs. of actual N per acre to reach 5 ton yield goal.

Ctrl + d clears worksheet

DRY ANIMAL WASTE APPLICATION WORKSHEET

11/2005

Client Name:	Jerrie Mitchell					Planner:	Eric Daniels			Date:	2/21/2007		
Field(s)	Total Acres	Field Application Acres	Crop to Grass Grown (include Sequence / Rotation if used)	Crop Yield Goal	Allowable P2O5 Application Rate By Field (lbs/ac/yr) Use OK Phosphorus Assessment Tool	Maximum Manure Application Rate By Field (tons/ac/yr) (Column F x J4)	Maximum Total Manure Application By Field (tons/field) (Column C x G)	Total Manure Nutrient Application (lbs/field) Manure Analysis: (enter below) 22 N **	60 P_2O_5 **	30 K_2O **	Additional Fertilizer Nutrients To Be Applied / Yield Goal (lbs/ac) N	P_2O_5	K_2O
1	10.0	8.0	bermuda	5	200	3.33	26.67	573	1,600	800	179		
2	17.0	15.0	bermuda	5	200	3.33	50.00	1,075	3,000	1,500	179		
5	100.0	53.0	bermuda	5	200	3.33	176.67	3,798	10,600	5,300	179		
6	15.0	14.0	bermuda	5	200	3.33	46.67	1,003	2,800	1,400	179		
10	24.0	22.0	bermuda	5	100	1.67	36.67	788	2,200	1,100	214		
12	82.0	10.0	bermuda	5	100	1.67	16.67	358	1,000	500	214		
13	8.0	8.0	bermuda	5	100	1.67	13.33	287	800	400	214		
Hayes	19.0	16.0	bermuda	5	200	3.33	53.33	1,147	3,200	1,600	179		
		0.0			0	0.00	0.00	0	0	0			
Totals	275.0	146.0					420	9,030	25,200	12,600	1,537	0	0

Numbers in these columns are rounded

Do not apply manure or organic by-products in the following situations: To areas within 100 feet of a perennial stream, pond, well, or sinkholes unless an established buffer strip is present; To areas within 50 feet of an intermittent stream unless an established buffer strip is present (*the width of all buffers will be used as a set back distance for application purposes*); To fields or portions of fields with >15%; To soils less than 10 inches in depth to parent material; On soils that are frequently flooded; On soils that are frozen, snow covered, or water saturated; On soils where the rock fragments in the surface layer are 3 to 10 inches in diameter and exceed 50% by weight; On soils where rock fragments in the surface layer are >10 inches in diameter and exceed 25% by weight; On soils where rock fragments are >10 inches in diameter which covers >3% of the soil surface and the slope is >8% (*see soil map descriptions*); On areas eroding at levels greater than the soil loss tolerance,"T", from water erosion or active gullies unless following a conservation plan that will reduce erosion below "T".; On soils that are occasionally flooded (*Exception: Waste may be applied on occasionally flooded soils between June 20 and September 20 or between February 1 and April 20 if the area is established to cool season grasses 4 inches in height at the time of application*).

Additional Application Notes and Recommendations

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For help see Instructions for Dry Animal Waste Application Worksheet

(2009 Cargill supp-00219)

Manure and Wastewater Handling and Storage Component

Manure and Wastewater Handling Management Plan: Identify manure and wastewater handling & storage required for the CNMP Plan, both existing and planned practices. This would include practices that are being cost-shared through USDA Farm Programs.

Oklahoma Planned Conservation Practice(s) (NRCS Code)	Tract #	Field #	Planned Amount (Number, Acres, or Feet)	Year Planned to be Applied / Installed
317 Composting Facility				Installed

Land Treatment Component

Field Sites Proposed for Land Application of Animal Waste

Planned Land Treatment: Identify land treatment practices in the CNMP Plan to address the resource concerns such as soil, water, and wind erosion, management of crops and grasses for fields that are proposed for land application. This would include practices that are being cost-shared through USDA Farm Programs.

Oklahoma Planned Conservation Practice(s) (NRCS Code)	Tract #	Field #	Planned Amount (Number, Acres, or Feet)	Year Planned to be Applied / Installed
528 Prescribed Grazing		All		
590 Nutrient Mangement		All		

Soil Testing Plan

Soil test(s) will be taken every **3rd year** where manure nutrients are being applied. Soil testing will be more often **(usually each year)** for fields located in a **"Nutrient Limited Watershed" (NLW)** as determined by the Oklahoma Water Resources Board and their website is: **http://www.owrb.state.ok.us/** . Samples should be submitted to the local **Oklahoma State University Extension Center** in each county. Soil tests will be taken before the first animal waste application of the year. Yield goals must be provided to obtain proper crop recommendations. This testing should include analysis for specific information to develop the nutrient management plan such as, **pH, nitrogen, phosphorus, and potassium.** When using manures, additional testing of **micro-nutrients and soil salinity management** should be evaluated periodically as a part of the soil testing program. **For liquid waste systems a "soil salinity management test" should be performed annually to monitor soil salinity.** The soil salinity management test can be performed along with the routine soil test using the same soil sample. The **Oklahoma State University Lab** will perform these tests. For more information their website is: **http://www.soiltesting.okstate.edu/** .

Using other soil testing labs in Oklahoma or other states is permitted, **however**, the lab shall use the same phosphorus and potassium extractant **(Mehlich-3)** used by the **OSU Laboratory** and shall be based on the same requirements of those used at OSU. Also, the lab used shall be a member of the **North American Proficiency Testing Program.**

OSU Fact Sheet 2207: Soil Sample Procedures
OSU Production Technology PT 2003-5: SOP for Collecting and Handling Soil Samples in Oklahoma
OSU Fact Sheet 2901: Procedures Used by OSU Soil, Water, & Forage Laboratory
OSU Fact Sheet L-241: OSU Laboratory Price Brochure

Manure and Wastewater Testing/Analysis Plan

Manure shall be analyzed **annually in Nutrient Limited Watersheds (NLW)** and **every three years in Non-Nutrient Limited Watersheds (NNLW).** The analysis should be performed as close to time of land application as possible from each storage structure. The manure analysis should include the following tests: **% Solids, Total N, Organic N, NH_4 or NH_3, P_2O_5, K_2O, and pH. Oklahoma State University Extension performs manure analysis.** Check with your local OSU County Extension Office for more information. Additional Animal Waste Management Publications from Oklahoma State University Extension are located on the following website: **http://www.animalwaste.okstate.edu/extension.htm**

OSU Laboratory Website: **http://www.soiltesting.okstate.edu/**
OSU Manure Sampling Fact Sheet-2248: **Sampling Animal Manure**
OSU Soil Salinity Fact Sheet L-241: **Soil Salinity Fact Sheet**

Additional Animal Waste Management Publications from Oklahoma State University Extension are located on the following website:
http://www.animalwaste.okstate.edu/extension.htm

Nutrient Management Application Component

Field Sites Proposed for Land Application of Animal Waste

Planned Nutrient Management Application: Identify fields and amount of allowable animal waste to be applied in the CNMP Plan. This would include practices that are being cost-shared through USDA Farm Programs.

Oklahoma Planned Conservation Practice(s) (NRCS Code)	Tract #	Field #	Acres	Spreadable acres	Tons/Ac.	Total Tons
633 Waste Utilization		All	275	146	3	420

Nutrient Application Equipment Calibration

HOW CAN I CALIBRATE MY MANURE SPREADER? There are three methods of calibrating spreaders, Tarp Method, Swath Width and Distance Method, and Loads/Field Method.

- **TARP METHOD:** **Application Rate (tons/acre) = lbs. of litter on tarp x 21.8 / width of tarp (ft.) x distance traveled (ft.)**
- **SWATH WIDTH & DISTANCE METHOD:** **Application Rate (tons/acre) = lbs. of litter in spreader X 21.8 / swath width (ft.) x distance traveled (ft.)**
- **LOADS PER FIELD METHOD:** Determine the weight of a spreader load. Count the number of loads applied to a field. Use the total weight of manure and the number of acres covered to determine the application rate. If you are not able to weigh your spreader, for estimation purposes, you can use the volume capacity of your equipment to approximate the total weight of the load in pounds. Although the bulk density of litter can be highly variable, the following conversions can be used for "average poultry litter":
  1 cubic foot of litter = 30 pounds, and 1 bushel of litter = 35 pounds.

COMMERCIAL APPLICATORS: Commercial Applicators are responsible for calibration of their equipment and keeping records of the land application rates, volumes of poultry litter applied, and landowners where poultry litter has been applied.

LANDOWNER APPLICATIONS: Landowners who apply their own poultry litter are responsible for keeping records of the land application rates, volumes of poultry litter applied, and transfers of poultry litter to other landowners.

Nutrient Content of Poultry Animal Waste: Identify nutrient availability from manure by the testing of animal waste. Note: The manure analysis figures for **"Available Nitrogen, P_2O_5, and K_2O"** will need to be reduced to account for land application losses.

Animal Waste Lab Used: Oklahoma State University **Date of Animal Waste Tests:** 5/22/06

Available Nitrogen (lbs/ton): 21.5 (Use 50% of Available N)

P_2O_5 (lbs/ton): 60 (Use 90% of Available P_2O_5)

K_2O (lbs/ton): 30 (Use 90% of Available K_2O)

Total Available lbs "N": 21.5 **Total Available lbs "P_2O_5":** 60 **Total Available lbs "K_2O":** 30

Watershed Category: Non-NL(Table 8) or NL(Table 9) Table 9 **Name of Watershed:** Illinois River

Soil Nutrient Tests Results: **Lab(s) Used:** A&L Analytical Laboratories, Inc.

Field No./Name	Soil Test No.	Date of Test	Soil Test " P "	Field No. /Name	Soil Test No.	Date of Test	Soil Test " P "
1	399293	1/5/06	34	Hayes	413695	5/22/06	70
2	399294	1/5/06	98				
5	399295	1/5/06	54				
6	413698	5/22/06	118				
10	413709	5/22/06	296				
12	413701	5/22/06	181				
13	413702	5/22/06	166				

Oklahoma Phosphorus Assessment Tool (OPAT) Ratings and Rates for Land Application Areas:

Ratings: Low, Moderate, High, Very High, Severe Rates: Full Rate, Full Rate/Split Applications, Half Rate, Plant Removal, No Application

Field No.	OPAT Ratings	OPAT Rates	Field No.	OPAT Ratings	OPAT Rates	Field No.	OPAT Ratings	OPAT Rates
1	Low	Full						
2	Moderate	Full						
5	Low	Full						
6	Moderate	Full						
10	High	Half						
12	High	Half						
13	High	Half						
Hayes	Moderate	Full						